

In the claims:

Please enter the amendments as indicated below.

- 1 1. (Currently Amended) A method comprising:
- 2 receiving real-time analog data at a personal computer implementing a general
- 3 purpose operating system;
- 4 generating a real-time event at the personal computer indicating a request to
- 5 process the real time data;
- 6 determining whether the real-time event has a higher priority than a first non-real
- 7 time event being processed at the personal computer; and
- 8 processing the real-time data [real-time event] if the real-time event has a higher
- 9 priority than the first non-real time event.
- 1 2. (Currently Amended) The method of claim 1 further comprising continuing to
- 2 process the first non-real time event if the real-time event does not have a higher priority
- 3 than the first event.
- 1 3. (Currently Amended) The method of claim 1 further comprising:
- 2 saving the state of the first non-real time event at the personal computer prior to
- 3 processing the real-time event; and
- 4 processing the [prior] first non-real time event after processing of the real-time
- 5 event has been completed.
- 1 4. (Currently Amended) The method of claim 1 further comprising:
- 2 receiving a second non-real time event while processing the real-time event; and

3 determining whether the second non-real time event has a higher priority than the
4 real-time event.

1 5. (Currently Amended) The method of claim 4 further comprising:
2 continuing the processing of the real-time event if the second non-real time event
3 does not have a higher priority than the [second] real time event.

1 6. (Currently Amended) The method of claim 4 further comprising:
2 terminating the processing of the real-time event if the second non-real time event
3 has a higher priority; and
4 processing the second non-real time event.

1 7. (Currently Amended) A computer system comprising:
2 a chipset;
3 a bus coupled to the chipset; and
4 a central processing unit (CPU), coupled to the bus, [that operates according to a
5 general purpose operating system, and processes real-time data received at the computer
6 system] to generate real-time events upon receiving real-time analog data and to process
7 the real-time analog data if the real-time event has a higher priority than a non-real-time
8 event.

1 8. (Currently Amended) The computer system of claim 7 wherein the CPU
2 comprises:
3 a timer to generate timing signals at predetermined time intervals; and
4 an event mechanism coupled to the timer to generate the real time events.

1 9. (Currently Amended) The computer system of claim 8 wherein the CPU further
2 comprises an event handler coupled to the event mechanism to process the real-time
3 events.

1 10. (Original) The computer system of claim 9 wherein the CPU further
2 comprises a register coupled to the event mechanism to store real-time data.

1 11. (Currently Amended) The computer system of claim 9 wherein the event
2 mechanism determines the relative priority between the real-time events and the non-real-
3 time events.

1 12. (Original) The computer system of claim 11 wherein the CPU further
2 comprises an analog to digital converter coupled to the register.

Sub
D1 } 1 13. (Currently Amended) A central processing unit (CPU) comprising:
2 a timer to generate timing signals at predetermined time intervals;
3 an event mechanism coupled to the timer to generate real time events in response
4 to receiving the timing signals and real-time data; and
5 an event handler coupled to the event mechanism to process the real-time events
6 received from the event mechanism upon determining the relative priority between the
7 real-time events and non-real-time events.
8 the CPU operating according to a general purpose operating system.]

1 14. (Previously Amended) The computer system of claim 13 wherein the CPU
2 further comprises a register coupled to the event mechanism to store real-time data.

1 15. (Previously Amended) The computer system of claim 14 wherein the event
2 handler verifies whether there is data stored in register upon detecting a real-time event
3 and determines the priority of the real-time event relative to other interrupts received.

1 16. (Previously Amended) The computer system of claim 14 wherein the CPU
2 further comprises an analog to digital converter coupled to the register.

1 17. (Previously Added) The method of claim 1 wherein receiving the real-time
2 analog data comprises:
3 converting the real-time analog data to digital data; and
4 storing the digital data at a register.